

CLAIMS

1. A transgenic mouse whose genome comprises a transgene comprising a transcriptional control region operably linked to a cDNA encoding calreticulin (CRT) wherein said control region comprises a promoter wherein expression of calreticulin in the vascular smooth muscle cells results in hemangioma formation.
2. The transgenic mouse according to claim 1 wherein the promoter is SM22 α promoter.
3. A transgene comprising a transcriptional control region operably linked to a cDNA encoding calreticulin wherein said control region comprises a SM22 α promoter.
4. A method for producing a transgenic mouse whose genome comprises CRT comprising:
 - introducing into a fertilized mouse egg a transgene comprising a transcriptional control region operably linked to a cDNA encoding CRT wherein said control region comprises a promoter;
 - transplanting the injected egg in a foster parent female mouse; and
 - selecting a mouse derived from an injected egg whose genome comprises CRT.
5. The method according to claim 4 wherein the promoter comprises SM22 α promoter.
6. A method for screening compounds that inhibit vascular tumor formation in a transgenic mouse comprising
 - providing a transgenic mouse whose genome comprises a transgene comprising a transcriptional control region operably linked to a cDNA encoding calreticulin (CRT);
 - allowing CRT to be expressed in said transgenic mouse
 - administering a compound to said mouse; and
 - determining whether said compound reduces hemangioma formation.
7. A compound isolated according to the method of claim 6.

8. A method of testing the therapeutic activity of a pharmacological agent on Kaposiform hemangioendothelioma comprising administering an effective amount of said pharmacological agent to the mouse of claim 1 and evaluating said agent's effect on hemangioma formation of said mouse.

5 9. A compound isolated according to the method of claim 8.

10. A method of inhibiting hemangioma formation comprising administering an effective amount of a matrix metalloproteinase inhibitor to a patient in need of such treatment.

11. A method of inhibiting hemangioma comprising administering to an
10 individual in need of such treatment an effective amount of virally-administered small interference RNA (siRNA) corresponding to a portion of CRT mRNA, wherein expression of the siRNA decreases the level of CRT.